

## A new *Aethecerus* species from Spain

(Insecta, Hymenoptera, Ichneumonidae, Alomyini)

Jesús Selfa & Erich Diller

Selfa, J. & E. Diller (2004): A new *Aethecerus* species from Spain (Insecta, Hymenoptera, Ichneumonidae, Alomyini). – *Spixiana* 27/1: 61-65

*Aethecerus tatoi*, spec. nov. is described from the South of Spain. The differences to the most closely related species, *Aethecerus subniger* (Berthoumieu, 1904), are discussed.

Jesús Selfa, Universitat de València, Departament de Zoologia, Laboratori d'Entomologia, Dr. Moliner, s/n, E-46100 Burjassot (València), Spain.

Erich Diller, Zoologische Staatssammlung München, Münchhausenstrasse 21, D-81247 München, Germany.

### Introduction

The genus *Aethecerus* Wesmael, [1845] belongs to the tribe Alomyini (sensu Wahl & Mason 1995) and to the subtribe Phaeogenina (sensu Diller 1981, Selfa & Diller 1994). *Aethecerus* is characterized by: Oral carina strongly raised and excavated behind the base of the mandible; gena excavated; apex of clypeus strongly impressed, above the impression with a more or less distinct ridge which is strongly impressed or absent centrally; clypeus separated from the supraclypeal area by a sharp groove.

*Aethecerus* Wesmael is represented in the Palaearctic region with 24 species and 1 subspecies, in the Nearctic region with 2 species (Yu & Horstmann 1997, Sebald et al. 2000).

### Material and Methods

The material was obtained from the G. Heinrich collection (labeled as "Mus. Zool. Polonicum Warszawa, 6/46, ex. col. G. Heinrich") kept in the Instytut Zoologiczny (Warszawa, Poland) (IZW). It was collected by André Seyrig in southern Spain at two localities of the Province of Ciudad Real (Fuencaliente and Puertollano) during the years 1924 (1 ex.), 1926 (1 ex.), and 1927 (the remaining 45 ex, including the holotype). The entomological collections of Zoologische Staatssammlung München

(ZSM), Munich, Germany and the Laboratori d'Entomologia del Departament de Zoologia de la Universitat de València (LEUV), València, Spain, contain 6 and 5 paratypes, respectively.

The new species has been compared with the lectotype of *Aethecerus subniger* (Berthoumieu, 1904), designation and combination by Diller (Diller & Horstmann 1994).

The REM pictures were obtained with the technique established by Selfa & Schönitzer (1994).

### *Aethecerus tatoi*, spec. nov.

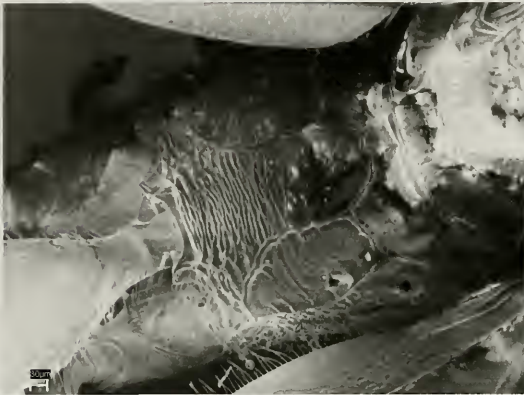
Figs 1-3

**Types.** Holotype: ♀, Spain, Sierra Morena, Fuencaliente, 20.6.1927, A. Seyrig (IZW). – Paratypes: 33♀♀, same location, data and collector (IZW); 6♀♀, same location, data and collector (ZSM); 5♀♀, same location, data and collector (LEUV); 1♀, same location, 15.8.1924, same collector (IZW); 1♀, Sierra Morena, Puertollano, 26.6.1926, same collector (IZW).

### Description of the adult female

Lengths. Body: 3.8-4.7 mm (holotype: 4.3 mm). Fore wing: 3.0-3.4 mm (holotype: 3.2 mm). Hind wing: 2.2-2.6 mm (holotype: 2.4 mm).

Colour pattern. Head black. Usually (including the holotype), supraclypeal area, clypeus and genae



Figs 1-3. *Aethecerus tatoi*, spec. nov. 1. Ventral view of head. 2. Lateral view of propodeum. 3. Dorsal view of propodeum.

Figs 4-6. *Aethecerus subniger* (Berthoumieu, 1904). 4. Dorsal view of propodeum. 5. Frontal view of head. 6. Lateral view of head.

dark brown. Sometimes the vertex, temples, frons, antennal scrobae of the face dark brown. Occasionally, head completely dark brown with frons, face, clypeus and genae reddish brown.

Flagella yellowish brown. Scapi and pedicelli brown. In the holotype the pedicelli are dark brown

dorsally. Mandibles yellowish brown to light brown, always with the teeth dark brown. Palpi yellowish brown.

Thorax predominantly black but sometimes dark brown. Pronotal collare dorsally yellowish brown to light brown or reddish brown. Tegulae yellowish

brown to light brown. In the holotype, the thorax is predominantly black, and the pronotal collaris and tegulae are yellowish brown.

Legs yellowish brown. Front and middle coxae sometimes light brown. Trochantelli and the front and middle tibiae internally yellowish brown (including the holotype) to light brown. Front and middle femora predominantly light to dark brown (including the holotype). Hind coxae, hind femora except the basal part narrowly, and hind tibiae on the distal part broadly dark brown. Hind trochanters brownish.

Wings hyaline. Stigma light brown. Basal sclerites of front wings ivory yellow.

Abdomen dark brown to reddish brown. In most cases (including the holotype) it is dark brown with the tergites II-III reddish brown. Usually the base of tergite II is light brown. Apex of tergite I (centrally) and tergites II-IV (usually) yellowish brown (including the holotype) to light brown, or occasionally only with a very small spot on tergites II-IV when the abdomen is dark brown.

Morphology. Head transverse, 1.3-1.6× (holotype: 1.4) broader than long, polished and for the greater part widely punctulate. Frons convex. Temples rounded in dorsal view. Occipital carina, in lateral view, well developed and clearly prominent in the middle of the temple. Distance between lateral ocellus and compound eye 0.4-0.7× (holotype: 0.6) as broad as temple. Face 1.6-1.8× (holotype: 1.7) broader than long and distinctly punctate. Supraclypeal area convex. Clypeus (Fig. 1) 2.1-2.5× (holotype: 2.2) broader than long, mostly convex although flattened on its central and apical part, smooth with a few weak punctures. Distal border of clypeus weakly concave centrally. Mandibles (Fig. 1) 1.6-2.0× (holotype: 1.6) longer than broad, in the middle narrow. Mandibles with the upper tooth thinner and longer than the lower tooth, smooth with a few weak punctures. Base of mandibles 1.5-2.0× (holotype: 1.6) longer than genae. Genae (Fig. 1) mat and with weak microstructure. Genal carina meeting oral carina distinct far from the base of the mandible.

Antennae with 17-18 segments (holotype: 17). Flagella weakly narrowed in the segments I-III broader distally. Flagellum segment I 1.7-2.0× (holotype: 1.7) longer than broad and 0.7-0.8× (holotype: 0.7) as long as segment II.

Thorax mostly sparsely polished and punctate. Pronotal collaris smooth. Remaining part of prothorax punctulate, with the distal border of the pronotum and the prosternum punctate, and the parts of pronotum adjacent to the prepectal carina with longitudinal carinulae. Notauli short and weakly im-

pressed. Sternauli deep, with carinulae, and reaching to  $\frac{1}{4}$  of the mesopleura. Lateral carinae reaching to  $\frac{1}{3}$  of the scutellum, scutellum widely punctate. Mesoscutum, scutellum, mesopleurae and mesosternum clearly punctate. Parts of mesopleurae adjacent to the subtegular ridge not or weakly carinulated (including the holotype). Parts of mesopleurae adjacent to the postpectal carina with longitudinal carinulae which are at most  $\frac{1}{3}$  as long as the mesopleura (including the holotype). Postscutellum punctate. Metasternum rugulose.

Propodeum (Figs 2, 3) subrounded in lateral view, slightly polished and clearly carinate. Area basalis with a centrally protuberance. Area superomedia (Fig. 3) subpentagonal and rounded basally, 1.1-1.3× (holotype: 1.1) longer than broad. Area superomedia distinctly rugulose (including the holotype) to weakly rugose although always with transverse carinulae clearly visible distally. Area petiolaris (Fig. 3) with distinct transverse carinulae and indistinct lateral carinae. Sometimes the transverse carina between the area superomedia and the area petiolaris is absent. Area superoexterna distinctly rugulose. Area dentipara small and long, mostly rugulose with the distal part rugose (including the holotype) to predominantly rugose. Area posteroexterna rugose. Area metapleuralis with some carinulae (including the holotype) or wrinkles with punctures. Remaining part of the propodeum punctate. Femora 3.1-3.7× (holotype: 3.5) longer than broad. Legs mostly scarcely punctulate, but front and middle coxae more strongly punctured. Hind coxae punctate and with abundant, relatively long hairs ventrally.

Abdomen elongate and distally narrowed. Postpetiolus with the dorsolateral carinae very weakly developed, median field hardly broader than lateral fields, smooth with some punctures. Lateral fields more or less striate longitudinally. Tergite II longer than broad, polished and strongly coriaceous with few punctures. Area between thyridiae and base of tergite II usually weakly strigose. Base of tergite II with distinct microstructure, centrally weakly transversely strigose (including the holotype) or without striae. Thyridiae relatively broad, 1.1-1.5× (holotype: 1.5) broader than the distance between the thyridiae. Tergites III and IV broader than long polished and coriaceous, scarcely punctulate. Tergites V-VII slightly coriaceous only on the base, remainder polished. Ovipositor clearly visible in dorsal view and with valvae covered with abundant short hairs.

The male of *Aethecerus tatoi* spec. nov. is unknown.

**Derivatio nominis.** This species is described in memory of Dr. Agustín Tato (the former Superior Technician of the Secció de Microscopia Electrònica del Servei Cen-

tral de Suport a la Investigació Experimental de la Universitat de València), who died in October 2000.

### Differential diagnosis

| <i>Aethecerus tatoi</i> , spec. nov.  | <i>Aethecerus subniger</i> (Berthoumieu, 1904)  |
|---|---|
| Head (Fig. 1) polished, weak and widely punctate, in front view relatively narrower and longer.                             | Head (Figs 5, 6) roughly sculptured and densely punctate, in front view relatively broader and shorter. |
| Facial orbitae smooth and polished, widely punctate.  | Facial orbitae roughly sculptured and densely punctate.   |
| Supraclypeal area (Fig. 1) convex few sparse punctures.   | Supraclypeal area (Figs 5, 6) flat and densely punctate.  |
| Mandibulae (Fig. 1) narrow in the middle.   | Mandibulae broad in the middle.   |
| The 17-18 flagellar segments relatively narrow and long.  | The 20 flagellar segments relatively broader and shorter.   |
| Thorax polished and with few punctures.   | Thorax roughly sculptured and densely punctate.   |
| Scutellum convex, polished with few punctures.  | Scutellum flat and densely punctate   |
| Area dentipara (Fig. 3) narrow and long.  | Area dentipara (Fig. 4) broader and shorter.  |
| Area petiolaris (Figs 2) with indistinct lateral carinae and with many distinct transverse carinulae.                       | Area petiolaris (Fig. 4) with distinct lateral carinae, rough and with indistinct transverse carinulae. |
| Hind coxae sparsely punctate.   | Hind coxae densely punctate.  |
| Abdominal tergite II longer than broad, polished and strongly coriaceous with few punctures.                                | Abdominal tergite II longer than broad, rough and densely punctate.                                     |
| Abdominal tergites III and IV polished and coriaceous scarcely punctate.  | Abdominal tergites III and IV rough and little punctate.  |
| Flagella yellowish brown, only the scapus and pedicellus dark brown.  | Flagella, scapus and pedicellus dark brown. Flagellar segments 1-4 yellowish.                           |
| Tibiae, femora, trochanters dark brown, only the distal part of the front and middle tibiae and femora sometimes yellowish. | Front and middle legs completely yellowish. Hind legs with only apices of femora brown.                 |
| Middle and hind coxae dark brown.   | Hind coxae dark brown.  |
| Hind trochanters brownish.  | Hind trochanters yellowish.   |

### Resumen

*Aethecerus tatoi*, spec. nov. es descrita del sur de España. Se discuten las diferencias en comparación con la especie más estrechamente relacionada, *Aethecerus subniger* (Berthoumieu, 1904).

### Zusammenfassung

Eine neue Art der Tribus Alomyini, *Aethecerus tatoi*, spec. nov. aus Südspanien, wird beschrieben. Sie ist nahe verwandt mit *Aethecerus subniger* (Berthoumieu, 1904).

### Acknowledgements

The authors are greatly indebted to Dr. Tomasz Huflejt (Instytut Zoologiczny of Warszawa) and Miss Claire Villemant (Muséum National d'Histoire Naturelle of Paris) for the loan of material, Tanja Kothe (ZSM) for the REM pictures, Marianne Müller (ZSM) for the pictures design, and to Martin Spies (ZSM) and Kees Zwakhals (Arkel) for the correction of the manuscript.

### References

Berthoumieu, V. 1904. Supplément aux "Ichneumoniens" d'Europe. – Échange 20: 13-15

- Diller, E. 1981. Bemerkungen zur Systematik der Phaeogenini mit einem vorläufigen Katalog der Gattungen (Hymenoptera, Ichneumonidae). – *Entomofauna* 2(8): 93-109
- & K. Horstmann 1994. Typenrevision der von Victor Berthoumieu beschriebenen Phaeogenini (Insecta, Hymenoptera, Ichneumonidae, Ichneumoninae). – *Spixiana* 17(3): 247-260
- Sebald, H., Schönitzer, K. & E. Diller 2000. Eine neue Art der Gattung *Aethecerus* Wesmael, [1845] aus der Ostpaläarktis (Hymenoptera, Ichneumoninae, Alomyini) – *Entomofauna* 21(28): 313-319
- Selfa, J. & E. Diller 1994. Illustrated Key of the Western Palearctic Genera of Phaeogenini (Hymenoptera, Ichneumonidae, Ichneumoninae). – *Entomofauna* 15(20): 237-251
- & K. Schönitzer 1994. Taxonomy of the European species of *Neotypus* Förster, [1869], with a key for their identification (Hymenoptera, Ichneumonidae, Ichneumoninae, Listrodomini). – *Entomofauna* 15(41): 469-480
- Wahl, D. B. & W. R. M. Mason 1995. The family-group names of the Ichneumoninae (Hymenoptera: Ichneumonidae). – *J. Hymenopt. Res.* 4: 285-293
- Wesmael, W. 1845. Tentamen dispositionis methodicae. Ichneumonum Belgii. – *Nouv. Mém. Acad. R. Sci. Lettr. Beaux-Arts Belg.* 18: 1-239 (1844)
- Yu, D. S. & K. Horstmann 1997. A catalogue of world Ichneumonidae (Hymenoptera). Part 1: Subfamilies Acaenitinae to Ophioninae. – *Mem. Amer. Ent. Inst.* 58: 1-763 [Ichneumoninae: 478-683]